

## A Real Witch's Brew

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**"Wow ... what a mess!" I thought as I looked at the bathroom of the dry cleaners where I worked part-time. Latrine duty was my least favorite chore, the dirtiest of the many dirty jobs that had to be done at the cleaners. I wasn't relishing the task. As I looked at the stains, I figured using bleach cleanser would be the only way to get them out. I grabbed a wet sponge, dipped it in a bucket of hot water and cleanser and started scrubbing, but to no avail. Then I had an idea. I had a bottle of ammonia, something I'd seen my mom use at home. Why not mix the bleach and ammonia together? I figured the combination would create a high-powered cleaner sure to remove even the toughest stains.**

I poured some ammonia into the bucket and began scrubbing again. But before long I was feeling dizzy and my lungs were hurting. When I walked out of the bathroom for some fresh air, the owner rushed over to see what was wrong. She was shocked when I told her what I'd done. I'd unwittingly concocted chloramine, or chlorine gas, a "witch's brew" similar to the phosgene gas used to kill Soldiers in World War I. I'd almost gassed myself! All it took was mixing a couple of household products with a lot of ignorance. Chemicals can be hazardous because of their toxicity, flammability, corrosiveness or how they react when combined with other substances. Toxic chemicals such as fungicides or insecticides can damage skin and other tissue and lead to serious injury or death. At low temperatures, flammable substances including hair sprays, solvents, adhesives and paint thinners can spontaneously combust. Corrosive chemicals such as cleaners for ovens, drains and toilets and battery acid can damage your skin on contact.

Reactive substances including dishwashing detergent and pool chemicals typically contain chlorine. When exposed to shock, pressure, temperature, air, water or other chemicals, they'll polymerize vigorously (the process where one or more small molecules form larger molecules). That's what happened when I mixed the bleach and ammonia.

Every day we're exposed to chemicals used for a variety of purposes in and around our homes. We have air fresheners and products for cleaning kitchens and bathrooms, washing dishes and removing stains from carpets and furniture. In our bathrooms we have deodorants and hair care products. For pets we have flea and tick killers. We store stain, caulk, sealers, adhesives and other home maintenance items in our garages along with lawn care chemicals such as fertilizers, weed killer and pesticides. For our vehicles and fuel-powered tools, we store things such as gasoline, brake fluid, battery acid, lubricants and degreasers. Homeowners with pools typically keep chemicals such as chlorine, algaecide and pH balance in their garage or storage shed.



Protecting yourself and your family from the hazards posed by these products is simple; it just takes a little time and attention. First, thoroughly read product labels to understand how to use them safely and what protective equipment might be required. Second, inspect your house, storage closet and garage for proper storage conditions. Ensure substances that are dangerous when mixed aren't stored side by side. Also make sure cabinets and doors are secured properly to prevent children or pets from opening them.

Finally, there are some important numbers you need to keep next to your phone. If you have a poisoning emergency, call the American Association of Poison Control Centers' toll-free hotline at (800) 222-1222 for immediate help. In addition, have the number for your family doctor and nearest hospital readily available. Each state has a poison control center; to find the one for your state, visit the AAPCC's Web site at [www.aapcc.org/findyour.htm](http://www.aapcc.org/findyour.htm).

### ---FYI

For more information on poison prevention, visit the AAPCC's home page at <http://www.aapcc.org/> and click on "Poison Prevention & Education."

### Should a poisoning occur:

- Stay calm
- Immediately call your poison control center or the AAPCC's hotline and have the following information ready:
  - Victim's condition, age and height
  - Name of the product and ingredients
  - How much of the product was taken
  - Time the poisoning occurred
  - Your name and telephone number

- Follow the poison center's instructions

#### Prevention tips

- Keep all household poisons and medicines in their original, labeled and child-proof containers.
- Lock poisons and medications out of the reach and sight of small children.
- Be as careful with non-prescription medicines as with prescription medications. Never refer to them as candy or take them in front of children.
- Never leave children alone with household products or medications. If you're using a product and must answer the telephone or door, take the child with you.
- Return household and chemical products to safe storage immediately after use.
- Know which plants can be poisonous and keep them away from children. Contact a local nursery or your state's poison center to find out which plants are safe.
- Never store household cleaning products in the same place you store food.
- Never place poisonous products in a container that once held drinks or food.